

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of James H. Cink et al.
Serial No. 10/805,802
Filed March 22, 2004
Confirmation No. 9954
For PEST CONTROL DEVICE AND MEHTOD
Examiner Kurt C. Rowan

Art Unit 3643

July 18, 2006

REPLY BRIEF

TO THE COMMISSIONER FOR PATENTS,

SIR:

This is a reply to the Examiner's Answer mailed May 18, 2006.

The Examiner's Answer primarily reiterates arguments that were set forth in the prosecution of this application prior to this appeal. Appellants addressed these arguments in the Appeal Brief, and will not repeat them here. But Appellants include the following additional comments regarding new arguments set forth by the Examiner.

Motivation to Combine is Based Upon Hindsight

Appellants asserted that Appellants' own disclosure provided the only motivation to combine the clearly divergent teachings of Bishoff et al. In particular, one explicit teaching of Bishoff et al. is that when a cylindrical bait is used, even if it is formed of two pieces, it is brought together so as not to provide a channel in a cylindrical surface (e.g., Figs. 1 and 3). The Examiner's combination of the teaching of Figs. 2 and 4 to produce an aggregation base having channels extending completely through it to a void that is an aggregation site for termites must fail in view of Bishoff et al.'s express teaching to the contrary in Figs. 1 and 3. The only way one can manipulate Figs. 2 and 4 to produce Appellants' claimed invention is by hindsight reconstruction, which is forbidden.

In the Examiner's Answer, the Examiner now concedes that while the channel 82 of the pest baiting device 80 of Fig. 2 is substantially closed, the channel may not be inaccessible because termites "can easily find their way to it." Concerning Fig. 4, the Examiner argues that

the gap between the monitoring devices 122 for receiving the elongated member 148 provides access for an aggregation site. With respect to Fig. 3, the Examiner argues that the openings 20 in the housing 12 and a gap between the monitoring devices 22 provides the claimed channel. The Examiner combines such teachings and argues that they are not improper hindsight reconstruction, although the Examiner clearly picks and chooses elements from different embodiments, while ignoring the clear features and elements explicitly taught by Bishoff et al.

A discussion of termite behavior is appropriate here. As would be readily understood by one skilled in the art, termites produce different types of pheromones in order to communicate effectively with one another. In particular, termites are capable of producing both a trailing pheromone and a recruitment pheromone. Termites traveling through small voids with space for one or two termites to pass one another, such as mud tubes, will only produce trailing pheromones. This encourages other termites to follow but will not encourage large numbers of termites to gather. Alternately, termites exploring a larger void representing a potentially sizable food supply will produce recruitment pheromones to encourage other termites to both follow the lead termites and gather in larger numbers in a particular area for development of an aggregation site. Termites only produce such recruitment pheromones in areas of adequate size for aggregation of multiple termites. Without such an adequately sized void, termites will only produce trailing pheromones, not recruitment pheromones. These types of pheromones are well understood by those skilled in the art. For example, a void capable of functioning as an aggregation site must be large enough to provide a void of sufficient size that will allow the space to be occupied by several termites at once. Only when exploring such a space of adequate size will one or more termites produce recruitment pheromone. Voids of insubstantial size, such as the substantially enclosed channels 82, 40 of Figs. 2 and 3 of Bishoff et al. and the gap between the enclosed members 122 of Fig. 4, are not of sufficient size to trigger a recruitment pheromone response for development of an aggregation site. Only if the void has sufficient size and provides sufficient food resources, will termites establish an aggregation site as a node within the termite colony.

Channel 82 is not a Void for Forming an Aggregation Site

With respect to the pest baiting device 80 of Fig. 2, there is no void capable of forming an aggregation site for the termites. According to Bishoff et al., the channel 82 is substantially

enclosed for receiving extractor means 42, 44. But according to the Examiner, the termites “can easily find their way to it.” The Examiner’s interpretation of Bishoff et al. is not reconcilable with Bishoff et al. itself. An aggregation site must have particular characteristics to function as an aggregation site. As explained in the specification, the design of the void “creates a stopping area in the center for aggregation.” Therefore, not all voids will function as an aggregation site. Only particularly designed voids will create such a stopping area for aggregation. Contrary to the Examiner’s Answer, Applicant has provided substantial evidence that such a substantially enclosed channel is unacceptable to termites. For example, Appellants’ Appeal Brief clearly states that the “elongate member 48 appears to mostly fill the channel 82, making it unacceptable as an aggregation site.” Such a substantially enclosed channel with an elongate member cannot function as an aggregation site. There is inadequate space for termites to release their recruitment pheromones. Thus, only Appellants’ disclosure provides relevant teaching of a void capable of forming an aggregation site.

Gaps Between Monitoring Devices 122 are Not Aggregation Sites

As discussed in Appellants’ Appeal Brief, the combination of the elongate member 148 and the monitoring devices 122 of Fig. 4 cooperate to form a narrow gap between the monitoring devices. This narrow gap is also not suitable for an aggregation site, because the gap is too small. The Examiner argues that the gap inherently provides access for termites to an aggregation site. But as discussed above with respect to the substantially enclosed channel 82, the gap is not large enough to function as an aggregation site. The gap is more akin to a narrow mud tube passage whereby a termite would only produce trailing pheromones, but is not large enough to cause a termite to produce the additional recruitment pheromones because there is insufficient space for more than a few termites. One skilled in the art would readily appreciate that such a gap is of insufficient size to create an aggregation site. At most, this portion of Bishoff et al. teaches a void of a size sufficient for a shelter tube, but not an aggregation site. Thus, only Appellants’ disclosure provides relevant teaching of a void capable of forming an aggregation site.

Channel 40 is Substantially Enclosed with No Channel Passing Through

A channel is either substantially enclosed or it is not. A channel cannot be both substantially enclosed and adapted for termites to easily find their way to it. In particular, the Examiner argues that there is a gap between the semi-cylindrical pieces 22 that allow access to the substantially enclosed channel 40 by the termites. The Examiner ignores the teaching of Bishoff et al. that the channel 40 must be substantially enclosed. Taking Bishoff et al. at face value, constructing a substantially enclosed channel 40 would include semi-cylindrical pieces 22 fitting flush together so that there is substantially no space between them. Moreover, Appellants do not concede that an incidental spacing between pieces that does not admit a termite would constitute a channel leading to the substantially enclosed channel. Otherwise, the channel 40 would not be substantially enclosed, as described by Bishoff et al. Thus, only Appellants' disclosure provides relevant teaching of a void capable of forming an aggregation site.

Bishoff et al.'s Teaching of Access Generally is Not at Issue

The Examiner's argument with respect to Bishoff et al.'s general teaching for termite "access" is not at issue on appeal. The Examiner further asks, "if Bishoff was not concerned with an access for termites why is [sic] there openings 120 in the housing." Here, the Examiner is misstating Appellants' argument. Appellants never disputed that Bishoff et al.'s openings 120 provide "access" to the monitoring devices 122 through the housing 112. Bishoff et al. is generally concerned with access by termites. But Appellants' arguments relate to a lack of teaching by Bishoff et al. of a structural void for forming an aggregation site and of a structural channel passing completely through the aggregation base from the cylindrical outer surface and leading to the void. The openings 120 provide neither a void for forming an aggregation site nor a channel passing completely through the aggregation base from the cylindrical outer surface and leading to the void. As such, the Examiner's statement that Bishoff et al. is "concerned" with "access" is not germane to Appellants' arguments or this Appeal.

Conclusion

In addition to the reasons set forth in Appellants' Brief on Appeal, the rejections of the claims on appeal are in error for the reasons set forth above. Therefore, Appellants request that the Examiner's rejections of all the claims be reversed.

Appellants do not believe that any fee is due. However, the Commissioner is hereby authorized to charge any deficiency or overpayment of any fees to Deposit Account No. 19-1345.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "B. Klein", with a stylized flourish at the end.

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